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LEE, HONG, DEGERMAN, KANG & WAIMEY 660 S. FIGUEROA STREET Suite 2300 LOS ANGELES, CA 90017			EXAMINER WANG, JIN CHENG	
			ART UNIT 2628	PAPER NUMBER
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

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<b>Office Action Summary</b>	<b>Application No.</b> 10/603,451	<b>Applicant(s)</b> HONG, CHANG HEUI	
	<b>Examiner</b> JIN-CHENG WANG	<b>Art Unit</b> 2628	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 24 July 2009.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 51-53, 56-63 and 71-73 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 51-53, 56-63 and 71-73 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

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## **DETAILED ACTION**

### ***Response to Amendment***

Applicant's submission filed on 7/24/2009 and 10/15/2009 has been entered. Claims 51-53, 56-63 and 71-73 are pending in the application.

### ***Response to Arguments***

Applicant's arguments and declarations filed 7/24/2009 and 10/15/2009 have been fully considered and are found persuasive to overcome the Song reference cited in the previous Office Action, but are moot in view of the new ground(s) of rejection set forth in the present Office Action.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 51-53, 56-63 and 71-73 are rejected under 35 U.S.C. 103(a) as being unpatentable over Anderson et al. US Patent No. 6,262,769 (hereinafter Anderson1) in view of Anderson US Patent No. 6,563,535 (hereinafter Anderson2), Uyehara et al. U.S. Patent No. 6,154,214 (hereinafter Uyehara), and Register U.S. Patent No. 5,661,632 (hereinafter Register).

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Re Claim 51:

Anderson1 discloses a method of controlling image display on a hand-held mobile communication terminal, the method comprising:

Displaying an image on a display screen of a hand-held mobile communication terminal, wherein the image is displayed over both a first display area and a second display area on the display screen, wherein the image comprises a photographic image, wherein the first and second display areas are juxtaposed each other on the display screen, and wherein substantial portions of both the first display area and the second display area are used for displaying the image (*At column 8, lines 5-15 and Fig. 9, Anderson1 discloses an orientation of the digital camera in which a landscape image would be recorded and the image can be displayed in its entirety in the landscape orientation on the entire display screen if the digital camera is held in landscape orientation. The image is then displayed in the portrait orientation in its entirety on the entire display screen if the digital camera is held by the user in the portrait orientation. Anderson1 discloses at column 8, lines 1-12 that the image is displayed in its entirety in landscape orientation or in portrait orientation on the entire display screen. Anderson1 then discloses at Fig. 10A that the orientation display device can be changed from the portrait orientation to the landscape orientation. Anderson1 describes with the illustrations at Figs. 10A-10B and 11 in detail the process of changing from the portrait orientation to the landscape orientation. Anderson1 discloses at Figs. 10A-10B and 11 that the portrait image originally displayed in its entirety in the portrait mode occupying the whole display screen going through the changes in Figs. 10A-10B and 11 can be scaled and rotated 90 degree and displayed in the landscape mode without occupying the whole display space and without overlapping with the icon area.*

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*Anderson1 teaches at Figs. 8A-8B, Figs. 10A-10B and 11 and column 6, lines 24-35, that a photographic image can be captured at upright landscape, inverted landscape and displayed in its entirety in landscape orientation in a display device. If the mobile communication device is oriented in the landscape mode, Anderson1's mobile device enables the landscape/portrait image to be displayed in the landscape/portrait mode respectively in its entirety occupying the whole the display screen of the mobile communication device comprising the first display area and the second display area for the display device 402 and the substantial portions of both the first display area for displaying the rotated image and the second display areas of the display device for displaying the icons are occupied by the photographic image displayed in the landscape/portrait mode. If the mobile communication device is held in portrait orientation, the image is then displayed in the portrait orientation occupying the whole display screen.*

*Anderson1 discloses at column 8, lines 23-30 that the portrait image can be rotated 90 degree onto a landscape oriented display 402 and can be reduced in size to display the entire image on the display 402. Significantly, Anderson1 discloses that, in this instant, no portion of the image would be cut for display (no cropping). It is noted that Anderson1's landscape/portrait image is displayed in its entirety occupying the whole display screen including the first display area and the second display area when the mobile communication device is held in the landscape/portrait orientation and the image is taken in the landscape/portrait orientation. The landscape/portrait image is subject to further manipulations by the process illustrated in detail in Figs. 10A-10B and 11);*

Displaying a rotated version of the image on the display screen, in response to a user interacting with the mobile communication terminal, wherein the image is rotated, relative to the

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display screen, at approximately a ninety degree angle and resized so that the rotated image is displayed in its entirety in the first display area of the display screen in exclusion of the second display area of the screen, wherein the rotated image is a duplicate scaled version of the entire image, and wherein the rotated image is a scaled version of the image in its entirety (*Anderson1 discloses at column 8, lines 23-30 that the portrait image can be rotated 90 degree onto a landscape oriented display 402 and can be reduced in size to display the entire image on the display 402. In this instant, no portion of the image would be cut for display. It is noted that Anderson1's landscape image is displayed in its entirety in the display screen including the first display area and the second display area when the mobile communication device is held in the landscape orientation. The landscape image is subject to further manipulations. At Figs. 10A-10B and 11, Anderson1 teaches that if the orientation of the mobile device is changed from the landscape orientation to portrait orientation, the photographic image of Figs. 8A-8B can displayed in portrait mode changed from the landscape mode which can be further scaled and rotated at 90 degree angle so that the rotated image is displayed in the first display area of the display screen 402' of the mobile communication device in exclusion of the second display area of the screen having the icons), and*

Displaying at least first and second icons in the second display area of the display screen (*At column 8, lines 35-40, Anderson1 discloses more than one icons such as the arrow 804'' and additional arrows are displayed. The plural icons of course may also include at least first and second icons in the empty area of the display screen. It is also noted that the flickering icons 804 and 804' can also be displayed in the second display area 802a'' and 802b''*), wherein the first and second icons are associated with functions for controlling image display on the hand-held

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mobile communication terminal (At column 7, lines 40-55, Anderson1 teaches more than icons associated with the rotating functions for controlling image display, but also directly actions can be made through the use of the LCD screen 402 in which a set of mode-specific items such as images, icons, and text are displayed and thus direct actions on the icons can be made. The icons at least indicate the image rotation functions and thus are associated with the image rotation functions for controlling image display).

At column 8, lines 5-15 and Fig. 9, Anderson1 discloses an orientation of the digital camera in which a landscape image would be recorded and the image can be displayed in its entirety in the landscape orientation on the entire display screen if the digital camera is held in landscape orientation. The image is then displayed in the portrait orientation in its entirety on the entire display screen if the digital camera is held by the user in the portrait orientation.

Anderson1 discloses at column 8, lines 1-12 that the image is displayed in its entirety in landscape orientation or in portrait orientation on the entire display screen. Anderson1 then discloses at Fig. 10A that the orientation display device can be changed from the portrait orientation to the landscape orientation. Anderson1 describes with the illustrations at Figs. 10A-10B and 11 in detail the process of changing from the portrait orientation to the landscape orientation. Anderson1 discloses at Figs. 10A-10B and 11 that the portrait image originally displayed in its entirety in the portrait mode occupying the whole display screen going through the changes in Figs. 10A-10B and 11 can be scaled and rotated 90 degree and displayed in the landscape mode without occupying the whole display space and without overlapping with the icon area. Anderson1 teaches at Figs. 8A-8B, Figs. 10A-10B and 11 and column 6, lines 24-35, that a photographic image can be captured at upright landscape, inverted landscape and displayed

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in its entirety in landscape orientation in a display device. If the mobile communication device is oriented in the landscape mode, Anderson1's mobile device enables the landscape/portrait image to be displayed in the landscape/portrait mode respectively in its entirety occupying the whole the display screen of the mobile communication device comprising the first display area and the second display area for the display device 402 and the substantial portions of both the first display area for displaying the rotated image and the second display areas of the display device for displaying the icons are occupied by the photographic image displayed in the landscape/portrait mode. If the mobile communication device is held in portrait orientation, the image is then displayed in the portrait orientation occupying the whole display screen.

Anderson1 discloses at column 8, lines 23-30 that the portrait image can be rotated 90 degree onto a landscape oriented display 402 and can be reduced in size to display the entire image on the display 402. Significantly, Anderson1 discloses that, in this instant, no portion of the image would be cut for display (no cropping). It is noted that Anderson1's landscape/portrait image is displayed in its entirety occupying the whole display screen including the first display area and the second display area when the mobile communication device is held in the landscape/portrait orientation and the image is taken in the landscape/portrait orientation. The landscape/portrait image is subject to further manipulations by the process illustrated in detail in Figs. 10A-10B and 11.

Anderson1 is silent to the claim limitation of a hand-held mobile communication terminal configured to communicate voice data in a wireless communication network. However, Anderson2 teaches the same mobile communication device of Anderson1 having the video



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teleconferencing capability (See Anderson2 column 3, lines 60-67 and column 4, lines 1-10).

Anderson1 further discloses that the sound data are recorded. A mobile device capable of video teleconferencing is also capable of both voice/sound and video communication over a wireless network, meaning that the voice sound data and video image frames to be sent to other remote devices. It is known that the mobile communication device capable of video teleconferencing allows the communication of voice data as well as the image data. Moreover, since the mobile communication device of Anderson1 is mobile and not wired, it requires a wireless network to be able to perform video teleconferencing. Therefore, Anderson1's mobile communication device is capable of video teleconferencing including communicating the voice data as well as the image data over a wireless network. It would have been obvious to have incorporated Anderson2 because Anderson2 and Anderson1 disclose the same mobile communication device. One of the ordinary skill in the art would have been motivated to do so to provide video teleconferencing capability for the mobile communication device in order to transmit the video and voice data over a wireless communication network such as a home wireless communication network.

Nevertheless, Uyehara and Register further discloses the claim mobile communication device.

Uyehara discloses a method of controlling image display on a hand-held mobile communication terminal, the method comprising:

Displaying an image on a display screen of a hand-held mobile communication terminal configured to communicate voice data in a wireless communication network (*at column 4, lines 60-65 and column 5, lines 1-10 Uyehara teaches that the device plays sound clips and includes a speech synthesizer to communicate audible output or digital audio signals; column 4, lines 35-50*

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*wherein the device directly downloads graphics images from the Internet), wherein the first image comprises a photographic image (at column 4, lines 60-65 Uyehara teaches that the graphics image include a photographic image);*

Displaying a rotated version of the image on the display screen (Figs. 17-18), in response to a user interacting with the mobile communication terminal to affirmatively control direction of rotation for the image (column 12, lines 1-33), wherein the image is rotated, relative to the display screen, at approximately a ninety degree angle and resized so that the rotated image is displayed in entirety in a first display area of the display screen, wherein the rotated image comprises a scaled version of the image, and wherein the rotated image is a scaled version of the image in its entirety (*See Figs. 17-18. Fig. 18 displays an image including the first image in Fig. 17 in its entirety and the width or height of the image has been adjusted and thus the image of Fig. 18 is both a scaled and rotated version of the first image in Fig. 17 in its entirety, i.e., all texts in Fig. 17 are displayed in Fig. 18*), and

Displaying at least first and second icons in a second display area of the display screen (*Fig. 17 discloses four fixed icons; see column 6, lines 9-20*), wherein the first and second display areas are non-overlapping (*rotation icon 80 as well as other icons are non-overlapping with the image having the text area; see Figs. 17-18; additionally the soft keys/icons are overlapped with the image having the text area; column 12, lines 1-35 and column 6, lines 9-20*), and wherein the first and second icons are associated with functions for controlling image display on the hand-held mobile communication terminal and wherein the second display area represented by an area formed between at least one edge of the display screen and one edge of the image, in response to rotating and resizing the image (*rotation icon 80 as well as other icons*

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*are non-overlapping with the image having the text area; see Figs. 17-18; Figs. 17-18 and column 12, lines 1-35 and column 6, lines 9-20).*

In other words, Uyehara further discloses rotating an image displayed on the display unit (*e.g., rotating the first image displayed on the Fig. 17*), in a first direction (*e.g., in a portrait mode*) relative to the display unit, to display a second image (*in response to the user's pressing of the orientation key 80 to display a second image in landscape mode*) and adjusting dimension and orientation of the second image relative to dimensions of the display unit (*the dimensional configuration of the image displayed in Fig. 18 are different from the dimensional configuration of the first image displayed in Fig. 17 in the portrait mode and the texts are redisplayed with the orientation shown in Fig. 18, see column 12. Adjusting the display orientation of the first image also adjusts the dimensional configuration of the second image in Fig. 18 in accordance with the width and height of the display unit. In Uyehara, the second image is obtained from the first image by rotating the first image and the text characters are re-arranged in a digital document. Due to image rotation, the original text characters displayed in the first image may not fit into the display area for the second image. Uyehara simply discloses that the text characters are re-arranged or reflowed after the first document image has been rotated. Having less text characters displayed in a third image does not mean Uyehara teaches away from the claimed limitation that the third image is a rotated version of the first image in its entirety*), wherein the first and second icons are displayed without requiring the mobile communication terminal to be in an orientation mode (*the icons/markers are displayed regardless of the orientation mode of the mobile device or without requiring the mobile device to be in an orientation mode. The rotation icon 80 is non-overlapping with the image having the text area; see Figs. 17-18; additionally the*

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*soft keys/icons are overlapped with the image having the text area and the icons are displayed without requiring the mobile device to be in any particular orientation mode; column 12, lines 1-35 and column 6, lines 9-20).*

Uyehara discloses an orientation key 80 and a plurality of software controlled markers 240-246 in response to the pressing of the orientation key 80 to control the rotation orientation of the image. The markers are software control keys (soft keys) in which the user can tap or touch (e.g., column 12, lines 20-21 and column 12, lines 50-57). However, the markers are displayed regardless of the orientation mode of the mobile communication device and thus are displayed without requiring the mobile device in any particular orientation mode.

The markers include the first and second orientation markers performing the same function as the first and second direction keys of performing clockwise or counter-clockwise rotation of the image (See column 6, lines 10-36). The plurality of markers also include the third and fourth orientation markers performing the same function as the third and fourth direction keys of performing 180 degree rotation or 0 degree rotation to return to its original orientation (column 6, lines 21-36). These four markers are software controlled to indicate direction or orientation in which the first image in Fig. 17 is rotated.

Although Uyehara does not explicitly disclose the graphical orientation markers 240-246 are not overlapping with the image having the text area, Uyehara explicitly teaches the rotation icon 80 and hotkey icon 82 are displayed in a second display area so as not to overlap with the first display area for displaying the image. It also needs to be shown that the prior art explicitly teaches a scaled version of the image. However, Uyehara discloses in Fig. 18 that the entire texts of the first image in Fig. 17 are rotated and presented in Fig. 18 which inherently requires the

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rotated image to be re-sized so as to fit into the limited display area of the mobile device.

Anderson1 discloses at Figs. 10A-10B, 11 and column 8 that the image can be scaled. This indicates that Uyehara's image can be scaled so as not to overlap with the soft icons. Therefore, having the combined teaching of Anderson1 and Uyehara, one of the ordinary skill in the art would have realized that any image displayed on the mobile device can be scaled so as not to overlap with the icons and can then be rotated 90 degree so as not overlap with the icon areas. One of the ordinary skill in the art would have been motivated to do this to select a text orientation which corresponds to the user's preferred device orientation and gripping method allowing a user to select the icons outside of the images in order not to obscure the images with the icons and these motivation statements can be found in Uyehara (See Uyehara Figs. 17-18 and column 6, lines 21-36) because Uyehara teaches or suggests the claim limitation of the icons to be non-overlapping with the displayed images by teaching in Figs. 17-18 that the orientation icons/keys 80 are outside of the display images to be rotated.

Register further discloses icons are separately displayed from the image areas and non-overlapping with the rotated or un-rotated image(s) displayed in the first display area (See Register Figs. 4-5). Register teaches the third image comprises a scaled version of the second image wherein at least a width or a height has been adjusted for the rotated image, and wherein the third image is a scaled and rotated version of the first image in its entirety (Register Figs. 4-5). Register discloses other claim limitations set forth in the claim 51 as well.

It would have been obvious to one of the ordinary skill in the art at the time the invention was made to combined the references, Anderson1, Anderson2, Register and Uyehara because

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they all are related to the same technology art of a mobile communication device for displaying and performing the image rotation and for display icons in the selected display area. One of the ordinary skill in the art would have been motivated to have perform image rotation in portrait mode or in landscape mode while displaying icons in the selected display area (Anderson Figs. 10A-10B, Fig. 11 and Register Figs. 4-5).

Moreover, these references share common features of displaying icons and rotating the image on the mobile communication device. Both Register and Anderson1 teaches that the soft keys are placed outside of the images to be rotated. The references teach the rotation of the images in accordance with the icons or soft keys. Placing the soft keys or icons outside the images to be rotated is old and well known in the art as evidenced in the Register and Anderson1. Uyehara teaches in Figs. 17-18 that the orientation icons/keys 80 are outside of the display images to be rotated. Uyehara at least teaches some icons are outside the display images to be rotated (See Figs. 17-18).

Moreover, whatever arrangement/placement of the keys on the mobile device do not matter as long as they are used to perform the same functions, i.e., rotating the image in clockwise direction, counter-clockwise direction etc. One of the ordinary skill in art realizes that locations for placing the keys/icons on the mobile device can be changed. As to the use of the keys/icons instead of the orientation key in combination with the markers, one of the ordinary skill in the art realizes that markers are software controlled markers which can be tapped to issue commands to control the image orientation performing the same function of the keys. One of the ordinary skill in the art would have been motivated to do this to select a text orientation which corresponds to the user's preferred device orientation and gripping method allowing a user to

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select the icons outside of the images in order not to obscure the images with the icons and these motivation statements can be found in Register and Uyehara (See Uyehara Figs. 17-18 and column 6, lines 21-36 and Register Figs. 4-5) because Uyehara teaches or suggests the claim limitation of the icons to be non-overlapping with the displayed images by teaching in Figs. 17-18 that the orientation icons/keys 80 are outside of the display images to be rotated.

Claim 52:

Uyehara is silent to the claim limitation “wherein the image and the rotated image have the approximately same aspect ratio.”

This claim limitation is readily found in Anderson1 Figures 10A-10B and Fig. 11 and column 7, lines 40-55.

Uyehara discloses the first image in Fig. 17 having a height C and a width D and the displayed image of Fig. 18 also has height C and width D. In view of the above teaching of Uyehara, **the rotated image in Fig. 18 has the same aspect ratio as the image in Fig. 17.**

Therefore, Uyehara at least implicitly teaches or suggests the claim limitation wherein the second image has the same width-height aspect ratio as the first image.

One of the ordinary skill in the art would have been motivated to maintain the same width-height aspect ratio for the rotated second image as the first image such that the original image remains un-scaled while being rotated (See Register Figs. 1-5 and Uyehara Figs. 17-18 and Anderson1 Figures 10A-10B and Fig. 11 and column 7, lines 40-55).

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Claim 56:

The claim 56 encompasses the same scope of invention as that of the claim 51 except additional claim limitation of a soft key. However, Anderson1, Anderson2, Register, Uyehara and Song further disclose the claim limitation of a soft key (Register Figs. 4-5 and Uyehara Figs. 17-18; column 6, lines 9-20 and Anderson1 Figures 10A-10B and Fig. 11 and column 7, lines 40-55). At column 7, lines 40-55, Anderson1 teaches actions can be made through the use of the LCD screen 402 in which a set of mode-specific items such as images, icons, and text are displayed and thus actions on the icons can be made and thus the icons constitute the soft keys. The icons are associated with the image rotation functions for controlling image display.

Re Claims 57 and 64:

Anderson1 further teaches the claim limitation of the rotated image has approximately same aspect ratio as the image in an un-rotated state (Anderson1 Figures 8A-8B, 10A-10B and Fig. 11 and column 7, lines 40-55 wherein the landscape image is scaled in the same aspect ratio and rotated while maintaining the same aspect ratio).

Claim 58:

Anderson1 further discloses at Figs. 10A-10B and 11 displaying an indicator such as the icons associated with the image rotation function for controlling the first and the second orientations in a second display area of the display screen, wherein the first display area of displaying the image and second display area of displaying the icons are non-overlapping. At column 7, lines 40-55, Anderson1 teaches actions can be made through the use of the LCD



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screen 402 in which a set of mode-specific items such as images, icons, and text are displayed and thus actions on the icons can be made. The icons are associated with the image rotation functions for controlling image display.

On the other hand, although Uychara does not explicitly disclose the graphical orientation markers 240-246 are not overlapping with the image having the text area, Anderson<sup>1</sup> teaches the image can be resized so that the graphical orientation markers can be displayed separately from the image. Incorporating Anderson<sup>1</sup>'s image scaling, Uychara's image can be scaled and icons and the image can be displayed in separate display areas such that the rotation icon and hotkey icon 82 are displayed in a second display area.

Register discloses icons are separately displayed from the image areas (See Register Figs. 4-5).

It would have been obvious to one of the ordinary skill in the art at the time the invention was made to have modified the software controlled markers of Uyehara with any forms of keys. Whatever arrangement/placement of the keys on the mobile device do not matter as long as they are used to perform the same functions, i.e., rotating the image in clockwise direction, counter-clockwise direction etc. One of the ordinary skill in art realizes that locations for placing the keys/icons on the mobile device can be changed. As to the use of the keys/icons instead of the orientation key in combination with the markers, one of the ordinary skill in the art realizes that markers are software controlled markers which can be tapped to issue commands to control the image orientation performing the same function of the keys. One of the ordinary skill in the art would have been motivated to do this to select a text orientation which corresponds to the user's

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preferred device orientation and gripping method (Uyehara column 6, lines 21-36 and Register Figs. 4-5).

Claim 59:

The claim 59 encompasses the same scope of invention as that of the claim 58 except additional claim limitation that the second display area is positioned between the first display area and at least one edge of the display screen. However, Anderson1 and Uyehara further discloses the claim limitation that the second display area is positioned between the first display area and at least one edge of the display screen (Uyehara Figs. 17-18; Uyehara Figs. 17-18; column 12, lines 1-35 and column 6, lines 9-20, Anderson1 Figs. 10A-10B and 11).

Claim 61:

The claim 61 encompasses the same scope of invention as that of the claim 58 except additional claim limitation of a soft key. However, Anderson1, Anderson2, Register and Uyehara further discloses the claim limitation of a soft key (Register Figs. 4-5 and Uyehara Figs. 17-18 and column 6, lines 9-20 and Anderson1 Figs. 10A-10B and 11). At column 7, lines 40-55, Anderson1 teaches actions can be made through the use of the LCD screen 402 in which a set of mode-specific items such as images, icons, and text are displayed and thus actions on the icons can be made and the icons provide the functionalities of the soft keys. The icons are associated with the image rotation functions for controlling image display.

Claim 62:

The claim 62 encompasses the same scope of invention as that of the claim 57 except additional claim limitation that the second orientation corresponds to a clockwise rotated version of the first image relative to the first orientation. However, Anderson1, Anderson2, Register and

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Uyehara further disclose the claim limitation that the second orientation corresponds to a clockwise rotated version of the first image relative to the first orientation (Register column 3, lines 5-10; Uyehara column 12, lines 1-35 and Figs. 17-18 and Anderson1 Figs. 10A-10B and 11 and column 8, lines 5-12 and Fig. 9).

Claim 63:

The claim 63 encompasses the same scope of invention as that of the claim 57 except additional claim limitation that the second orientation corresponds to a counter-clockwise rotated version of the first image relative to the first orientation. However, Anderson1, Anderson2, Register and Uyehara further disclose the claim limitation that the second orientation corresponds to a counter-clockwise rotated version of the first image relative to the first orientation (Register column 3, lines 5-10; Uyehara column 12, lines 1-35 and Figs. 17-18, Anderson1 Figs. 10A-10B and 11 and column 8, lines 5-12 and Fig. 9).

Re Claims 53 and 60:

Register discloses the second image in Fig. 5 has a width C and a height D and the first image in Fig. 4 has width A and a height B in which the width C of the second image corresponds to the width A of the display, and the height D of the second image corresponds to the height B. It would have been obvious from the first image of Fig. 4 and the second image of Fig. 5 to see that C is approximately equal to A and D is approximately equal to B. Thus, D is approximately equal to  $A \cdot A/B$  as claimed when  $A=B$ . Anderson1 teaches at Figs. 10A-10B that the action of scaling and rotating set forth in Figs. 10A-10B allows the scaling of the image in

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which the size of the rotated or un-rotated image can be arbitrarily re-sized such that  $C = A$  and  $D$  can be resized to be any dimension including the value determined by  $A * A/B$ .

Re Claim 71:

As to the claim limitation of key flickering, Anderson1 teaches in Figs. 10A-10B and 11 that the icons 804, 804' have been flickered in the respective figures to show the direction of rotation.

Re Claims 72-73:

Anderson1 further teaches the claim limitation that a flipped version of the image is displayed on both the first and the second display areas, in response to a user interacting with button of the mobile device and the interacting comprises pressing the button more than once (Figs. 10A-10B and 11 and column 7, lines 35-55). At column 7, lines 40-55, Anderson1 not only teaches image rotation functions, but also direct actions can be made through the use of the LCD screen 402 in which a set of mode-specific items such as images, icons, and text are displayed and thus direct actions on the icons can be made to perform the image rotation functions. The icons not only indicate the image rotation functions, but also are associated with the image rotation functions for controlling image display.

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

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A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jin-Cheng Wang whose telephone number is (571) 272-7665. The examiner can normally be reached on 8:00 - 6:30 (Mon-Thu).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kee Tung can be reached on (571) 272-7794. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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/Jin-Cheng Wang/

Primary Examiner, Art Unit 2628